

Accelerating Interdisciplinary Research in Water

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Beyond Boundaries: Highlighting Interdisciplinary Excellence In Team Development And Research

VISION AND MISSION

Vision: A future American West where there is greater harmony in coupled water-energy-human systems

Mission: We help facilitate the transition to an American West where there is greater harmony in coupled water-energy-human systems by meaningfully engaging with diverse partners to carry out transformative research and workforce development that is inspired by the co-identified needs of our partners. The core values that underlie our mission include our recognition of the fundamental right of self-determination of partner communities, the value of relationships in co-producing and co-delivering knowledge, and our role in promoting trustworthy research inspired by the uses to which produced knowledge will be put.

Research Priorities:

- **Research Priority 1:** Climate solutions amid water scarcity
- **Research Priority 2:** Innovation in regional water & energy systems
- **Research Priority 3:** Restoration of habitat and salmon populations
- **Research Priority 4:** Equity in water & energy access, ownership and control
- **Research Priority 5:** Sustainability in rural and urban land use

ACTIVITIES

In support of our IRA, we carried out the following activities:

Monthly Meetings

- Monthly meetings were held early over the course of the IRA as a mechanism to build group camaraderie and develop a common vocabulary to bridge across disciplinary, career stage, and academic unit divides.

Writing Retreats

- We carried out two short writing retreats over the course of two academic years. The overarching goal of retreats was to identify priority research areas that engaged two or more IRA group members and begin identifying some common research questions.

Lunch & Learns

- Provided a relatively informal way for group members to do a deeper dive into their own research. Group members presented a ~10 minute presentation (aimed at a non-expert, but educated audience) of current research interests and directions.
- We intentionally cultivated an environment in which group members could feel comfortable asking questions of clarification and definition. This promoted deeper understanding and relationship between and among members.

INVESTMENTS

An important issue within our IRA group was addressing **equity** in salary, workload expectations, and positionality within the university.

With IRA seed funding, therefore, made strategic investments in **early career** and **non-tenure track faculty**. The following are representative of investments made:

Summer Salary Support. Group members been able to secure time and freedom to develop proposals broadly aligned with research priorities of the IRA group. This is particularly valued because it formally recognizes the time contribution and supports the individual research agendas of IRA group members.

Participant Support Costs. IRA support has been leveraged to support a small event that will bring community partners and researchers at DOE National Labs to campus for a focus group on resilience at the water-energy nexus.

Travel. Group members have also leveraged IRA support for travel that may not otherwise happen. For example, one member is engaging in travel to develop partnerships in support of an NSF CAREER grant that will be submitted this summer

Professional Development Costs. Other group members have leveraged IRA seed funding to support professional development activities aligned with IRA research themes. For example, these have included registration fees for workshops and meetings that faculty might not have otherwise attended.

SUCSESSES

- The IRA led to new partnerships between multiple IRA team members and the Shoshone-Bannock Tribes on topics ranging from small-scale hydropower to low-technology restoration efforts on the Fort Hall Reservation.
- A successfully funded NSF Convergence Accelerator, entitled “Track K: Equity in water information for community capacity building” was led by Dr. Kendra Kaiser with involvement from Drs. Sophia Borgias, Lee Parton, and Anna Bergstrom.
- The IRA led to important contributions to the Zena Creek Ranch interdisciplinary field school in summer 2023. The ranch is a potential demonstrator for rural, small-scale hydroelectric projects and provides an interdisciplinary experiential learning opportunity.

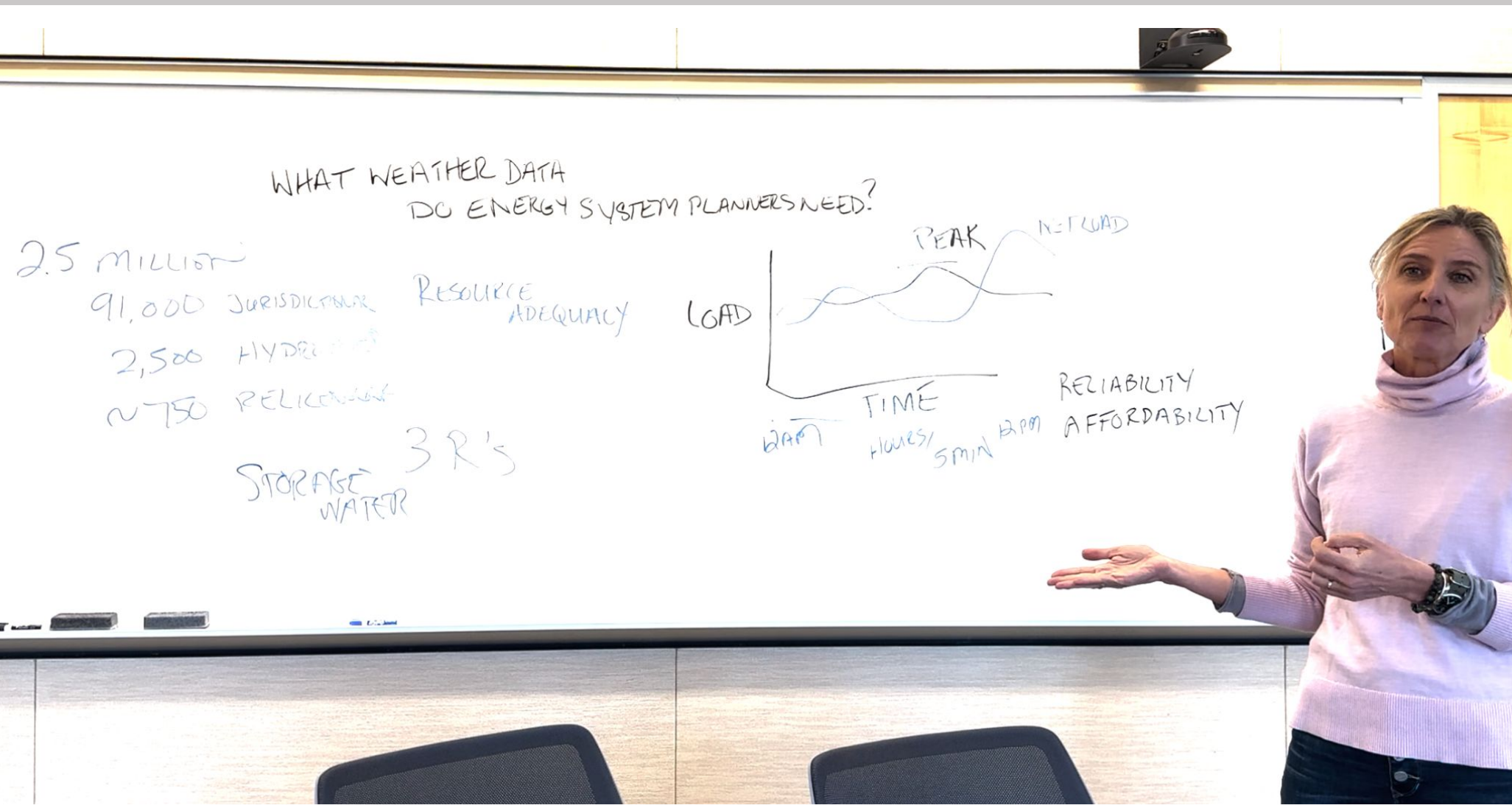


BOISE STATE UNIVERSITY

FUTURE DIRECTIONS

This IRA group is in the process of transitioning to a less formal affinity group. Continued formal future engagement is a possibility through emerging models for affinity groups in the School of the Environment.

However, most activities our IRA group carried out can be continued at low or no cost in the future.



Dr. Stephanie Lenhart provides a chalk talk on increasing complexity of the grid and intersections with weather and water at an IRA Lunch & Learn.

NEXT STEPS

Tracking investments

- What are the outcomes of the investments made with IRA seed funds over the next 6, 9, and 12 months?

Navigating transition

- What mechanisms exist to support continued engagement?
- How does our IRA sustain engagement and navigate the addition of new members and potential graduation of existing ones?

CONCLUSION

The IRA process supported intentional and sustained engagement of faculty from four Colleges and diverse career stages and disciplinary perspectives.

Continuous engagement by faculty allowed us to navigate diverse methodological and disciplinary languages and perspectives, ultimately finding common ground and opportunities for collaboration in research and teaching.

Future directions of the water affinity group will emerge as a product of IRA seed funds, which were used to make strategic investments in early career and non-tenure track faculty in order to support early stage research projects that aligned with the IRA research priorities.